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Staszak, Janna/VBO

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Sent: Thursday, November 30, 2006 2:23 PM
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Cc: Barber.Joshua@epamail.epa.gov
Subject: Draft Final Engineering Evaluation/Cost Analysis for Site 5 Waste/BurntSoil Area and Impacted Surface Soil and Sediment Areas; St. Juliens CreekAnnex, Chesapeake, Virginia; October 2005

All. Please find the comments from BTAG on the subject document.

Please let me know if you have any questions.

General Comment

The BTAG previously participated in a scoping meeting with the Navy, Army Corps of Engineers (ACOE), and the Virginia Port Authority (VPA) regarding the EE/CA for Site 5. At the meeting a plan was discussed where the Navy would perform the necessary excavation to address contamination at the site followed by the ACOE and VPA performing additional excavation to construct tidal wetlands at the site. BTAG supported this approach. An update and discussion of this approach should be provided in this document.

Specific Comments

1. Section 2.4 Ecological Based Removal Areas, on Page 2-6 includes a discussion of pesticide concentrations (DDT and breakdown products) at the site. In the EE/CA scoping meeting and previous discussions, BTAG recommended that hot spots of pesticide contamination be addressed in the EE/CA. Of particular concern are locations SS-35, SS-56, and SS-59
south of the burnt soil area. Other hot spot locations are being addressed in the removal with the exception of SS-13. These hot spot areas are an order of magnitude above ecological values and the 95% background UTL for dredge fill soil identified in Table 2-4, as well as the vast majority of samples collected at the site. This information does not support the contention that concentrations at the site are a result of historical applications, when compared to facility wide soil concentrations. Furthermore, it is not appropriate to base ecological risk management strictly on average concentrations. The distribution and magnitude of contaminant concentrations across the site needs to be
evaluated. BTAG recommends that pesticide hotspots south of the burnt soil area be addressed in the EE/CA.

2. Section 4.1 Confirmation Sampling, on Page 4-2, indicates that confirmation sampling results will be compared to human health clean-up goals. The data should also be compared to ecological clean-up goals.

3. Section 4.1 states that all fill material will be brought from off-site, and will be certified clean and analytical testing and comparison to human health criteria and dredge fill background. It is unclear how St. Juliens Creek dredge fill background is relevant to determine if off-site fill is clean. The concentrations should also be compared to ecologically protective values, particularly since the majority of the site will become wetlands.

4. Section 4.1 states that vegetative stabilization with the use of native grasses and wildflowers will be performed. A specific seed mix is not provided. BTAG recommends that the seed mix consist of the following species and rates. All seeding rates are per acre of pure live seed (PLS). The PLS should be specified when ordering.

	Pounds/acre PLS
Big Bluestem (Andropogon gerardi)	4

Little Bluestem (Schizachyrium scoparium)		6
Switchgrass (Panicum virgatum)		2
Indiangrass (Sorghastrum nutans)		6
Canada Wild Rye (Elymus canadensis)	10	
Partridge Pea (Cassia fasciculata)		2
Annual Rye Grass (Lolium multiflorum)		25

The heavier seeding with annual rye grass provides immediate erosion control, as it will sprout and easily become established. The annual rye grass and the Canadian wild rye will also act as a nursery crop to protect the smaller seedlings of the other species until they can become established. Planting of a legume species (partridge pea) will improve soil conditioning and habitat quality. When the annual rye grass dies after one year, the other warm season grass species should be fairly well established, and will provide the longer term erosion control needed on these landfill caps or other cap systems. Wildflowers can also be planted with the mix to provide nectar source for birds, butterflies and other insects. The following wildflower species are widely distributed and adapted to similar conditions and should be added where additional plant diversity, wildlife value, and color is desired. All of the species listed are tall enough that they will be able to compete with native grasses for sunlight.

Pounds/acre PLS		
Black-eyed Susan (Rudbeckia hirta)		½
Lanceleaf Coreopsis (Coreopsis lanceolata)		½
Common Milkweed (Asclepias syriaca)	½	
Wild Bergamot (Monarda fistulosa)		½

5. Section 4.1.2 discusses the installation of a cover as part of Alternative 2. The implementation of this alternative would require wetland mitigation to replace wetlands impacted by the cover. This issue is not discussed as part of this alternative.

6. Section 4.1.5 states that the implementation of the preferred alternative would require two years of monitoring and maintenance of the site. It is unclear that two years of wetland monitoring would be sufficient to show that the wetland restoration was a success. Specific criteria should be developed and monitoring should continue until success criteria have been achieved.

7. Section 4.1.5 states that maintenance of the site will include the implementation of measures to prevent the invasion of non-native plant species, including Phragmites. The BTAG believes it would be advantageous, if possible, to spray the large area of Phragmites adjacent to the site using the herbicide HABITAT, to reduce the potential for it to invade the restored wetland. Otherwise, maintenance activities will be prolonged and potentially more costly to keep Phragmites in adjacent areas out of the site.

8. Section 4.2.4 Alternative 4 - Excavation and Restoration/Wetland Creation includes provisions for revegetation of the site. If future plans are to include tidal wetlands at the site, revegetation plans will need to be re-evaluated. In particular, plantings of trees and wetlands shrubs should be reevaluated. Note that Table 4-1 indicates in the description for Alternative 4 that excavation will be performed to support tidal wetlands, which is inconsistent with the text. BTAG supports the creation of tidal wetlands at the site, however, further discussion and coordination will be required.